

Serial No.: 10/581374\_E

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NEWS	3	OCT 06	Increase your retrieval consistency with new formats or for Taiwanese application numbers in CA/CAPLUS.
NEWS	4	OCT 21	CA/CAPLUS kind code changes for Chinese patents increase consistency, save time
NEWS	5	OCT 22	New version of STN Viewer preserves custom highlighting of terms when patent documents are saved in .rtf format
NEWS	6	OCT 28	INPADOCDB/INPAFAMDB: Enhancements to the US national patent classification.
NEWS	7	NOV 03	New format for Korean patent application numbers in CA/CAPLUS increases consistency, saves time.
NEWS	8	NOV 04	Selected STN databases scheduled for removal on December 31, 2010
NEWS	9	NOV 18	PROUSDDR and SYNTHLINE Scheduled for Removal December 31, 2010 by Request of Prous Science
NEWS	10	NOV 22	Higher System Limits Increase the Power of STN Substance-Based Searching
NEWS	11	NOV 24	Search an additional 46,850 records with MEDLINE backfile extension to 1946
NEWS	12	DEC 14	New PNK Field Allows More Precise Crossover among STN Patent Databases
NEWS	13	DEC 18	ReaxysFile available on STN
NEWS	14	DEC 21	CAS Learning Solutions -- a new online training experience
NEWS	15	DEC 22	Value-Added Indexing Improves Access to World Traditional Medicine Patents in CAPLUS
NEWS	16	JAN 24	The new and enhanced DPCI file on STN has been released
NEWS	17	JAN 26	Improved Timeliness of CAS Indexing Adds Value to USPATFULL and USPAT2 Chemistry Patents
NEWS	18	JAN 26	Updated MeSH vocabulary, new structured abstracts, and other enhancements improve searching in STN reload of MEDLINE
NEWS	19	JAN 28	CABA will be updated weekly
NEWS	20	FEB 23	PCTFULL file on STN completely reloaded
NEWS	21	FEB 23	STN AnaVist Test Projects Now Available for Qualified Customers
NEWS	22	FEB 25	LPCI will be replaced by LDPCI
NEWS EXPRESS 17 DECEMBER 2010 CURRENT WINDOWS VERSION IS V8.4.2 .1,			

Serial No.: 10/581374\_E

AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

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=> file registry  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.23	0.23

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 2 MAR 2011 HIGHEST RN 1265968-43-1  
DICTIONARY FILE UPDATES: 2 MAR 2011 HIGHEST RN 1265968-43-1

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

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<http://www.cas.org/support/stngen/stndoc/properties.html>

=> e 9,11,10,12-conjugated linoleic acid/cn

E1	1	9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E2	1	9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E3	0 -->	9,11,10,12-CONJUGATED LINOLEIC ACID/CN
E4	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN

E6	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7	1	9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN OLINE/CN
E8	1	9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9	1	9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10	1	9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11	1	9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12	1	9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11 (or 10,12)-octadecadienoic acid methyl ester/cn

E1	1	9,10C-(IMINOETHANO)-10CH-BENZOFURO(4,3,2-IJK)(2)BENZAZEPINE, 4A,5,6,7,8,8A,9,10-OCTAHYDRO-, (4AR,8AR,9R,10CS)-/CN
E2	1	9,10C-(IMINOETHANO)-10CH-BENZOFURO(4,3,2-IJK)(2)BENZAZEPINE, 4A,5,6,7,8,8A,9,10-OCTAHYDRO-, (4AR-(4AA,8AA,9. ALPHA.,10CA))-/CN
E3	0 -->	9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
E4	1	9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,1 1B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-/CN
E5	1	9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,1 1B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-, ACETATE/CN
E6	1	9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E7	1	9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E8	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E9	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E10	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E11	1	9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN OLINE/CN
E12	1	9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN

=> e 9,11,10,12-octadecadienoic acid/cn

E1	1	9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E2	1	9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E3	0 -->	9,11,10,12-OCTADECADIENOIC ACID/CN
E4	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E6	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7	1	9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN OLINE/CN
E8	1	9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9	1	9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10	1	9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11	1	9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12	1	9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11-octadeca-10,12-dienoic acid/cn

E1	1	9,11-OCTACOSANEDIOL, 3-METHOXY-4-METHYL-/CN
E2	1	9,11-OCTACOSANEDIONE/CN
E3	0 -->	9,11-OCTADeca-10,12-DIENOIC ACID/CN
E4	1	9,11-OCTADECADIEN-1-AMINE/CN
E5	1	9,11-OCTADECADIEN-1-AMINE, (9Z,11Z)-/CN

E6	1	9,11-OCTADECADIEN-1-AMINE, (Z,Z)-/CN
E7	1	9,11-OCTADECADIEN-1-OL/CN
E8	1	9,11-OCTADECADIEN-1-OL, (9E,11E)-/CN
E9	1	9,11-OCTADECADIEN-1-OL, (9Z,11E)-/CN
E10	1	9,11-OCTADECADIEN-1-OL, (9Z,11Z)-/CN
E11	1	9,11-OCTADECADIEN-1-OL, (E,Z)-/CN
E12	1	9,11-OCTADECADIEN-1-OL, (Z,Z)-/CN

=> e 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

E1	1	9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,11B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-, ACETATE/CN
E2	1	9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E3	1 -->	9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E4	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM CHLORIDE/CN
E5	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM HYDROXIDE/CN
E6	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM IODIDE/CN
E7	1	9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINE/CN
E8	1	9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9	1	9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10	1	9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11	1	9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12	1	9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11(or 10,12)-octadecadienoic acid methyl ester/cn

E1	1	9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E2	1	9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E3	0 -->	9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
E4	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM CHLORIDE/CN
E5	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM HYDROXIDE/CN
E6	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM IODIDE/CN
E7	1	9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINE/CN
E8	1	9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9	1	9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10	1	9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11	1	9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12	1	9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

E1	1	9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,11B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-, ACETATE/CN
E2	1	9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E3	1 -->	9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E4	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM CHLORIDE/CN
E5	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM HYDROXIDE/CN
E6	1	9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI BENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINIUM IODIDE/CN
E7	1	9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B) ISOQUINOLINE

Serial No.: 10/581374\_E

                  OLINE/CN  
E8                  1          9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN  
E9                  1          9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN  
E10                 1          9,11,12-TRIMETHYLHEXADECANOIC ACID/CN  
E11                 1          9,11,12-TRIMETHYLPENTADECANOIC ACID/CN  
E12                 1          9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> s e3

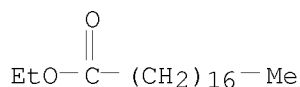
L1                  1 "9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER"/CN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2011 ACS on STN  
RN 467252-95-5 REGISTRY  
ED Entered STN: 29 Oct 2002  
CN Octadecadienoic acid, ethyl ester (CA INDEX NAME)  
OTHER NAMES:  
CN 9,11(or 10,12)-Octadecadienoic acid ethyl ester  
CN Conjugated linoleic acid ethyl ester  
MF C20 H36 O2  
CI IDS  
SR CA  
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, CHEMLIST, TOXCENTER, USPAT2,  
USPATFULL

CM 1

CRN 111-61-5  
CMF C20 H40 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
20.60	20.83

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011  
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FILE COVERS 1907 - 3 Mar 2011 VOL 154 ISS 10  
FILE LAST UPDATED: 2 Mar 2011 (20110302/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

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<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s l1/prep
      11 L1
      5177151 PREP/RL
L2      1 L1/PREP
      (L1 (L) PREP/RL)
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=> d l2 1 ibib abs
```

```
L2  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:    2008:650375  CAPLUS
DOCUMENT NUMBER:     151:510826
TITLE:               Synthesizing ethyl ester of conjugated linoleic acid
                    with potassium alcoholate
AUTHOR(S):           Jiang, Wei; Wan, Zilong; Yi, Dan; Shi, Hongqi; Liu,
                    Fayi
CORPORATE SOURCE:    First Institute of Oceanography, State Ocean
                    Administration, Qingdao, 266061, Peop. Rep. China
SOURCE:              Zhongguo Liangyou Xuebao (2007), 22(3), 77-79
                    CODEN: ZLXUFO; ISSN: 1003-0174
PUBLISHER:           Zhongguo Liangyou Xuebao Bianjibu
DOCUMENT TYPE:       Journal
LANGUAGE:            Chinese
OTHER SOURCE(S):     CASREACT 151:510826
AB  The Et ester of conjugated linoleic acid (CLA) was synthesized with Et
    ester of safflower oil as raw material and with potassium alcoholate
    (KOCH2CH3) as catalyzer. The mol. structures of CLA were determined by
    UV-spectrum and GC-chromatogram. The CLA prepns. contained mainly cis-9,
    trans-11-CLA and trans-10, cis-12-CLA. The effects of catalyzer content,
    temperature, time and water content on the conjugation were investigated. It
    was shown that the optimized conditions were catalyzer 5%, water 1%, and
    temperature 95°. The conjugation rate was up to 95% when the reaction
    was carried on for 2-3 h under the optimal conditions.
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=> d his
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(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11,10,12-OCTADECADIENOIC ACID/CN  
E 9,11-OCTADECADIENOIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP

=> s 9,11(or 10,12)-octadecadienoic acid methyl ester  
MISSING OPERATOR '9,11(OR'

The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s 9,11-octadecadienoic acid methyl ester

2299179 9  
1190715 11  
0 OCTADIEADIENOIC  
5241421 ACID  
1804215 ACIDS  
5799226 ACID  
(ACID OR ACIDS)  
1184072 METHYL  
791 METHYLS  
1184538 METHYL  
(METHYL OR METHYLS)  
1059680 ME  
12637 MES  
1067995 ME  
(ME OR MES)  
1861732 METHYL  
(METHYL OR ME)  
678631 ESTER  
501337 ESTERS  
946527 ESTER  
(ESTER OR ESTERS)

L3 0 9,11-OCTADIEADIENOIC ACID METHYL ESTER  
(9 (W) 11 (W) OCTADIEADIENOIC (W) ACID (W) METHYL (W) ESTER)

=> s 9,11-octadecadienoic acid methyl ester

2299179 9  
1190715 11  
17656 OCTADECADIENOIC  
5241421 ACID  
1804215 ACIDS  
5799226 ACID  
(ACID OR ACIDS)  
1184072 METHYL  
791 METHYLS  
1184538 METHYL

(METHYL OR METHYLS)

1059680 ME

12637 MES

1067995 ME

(ME OR MES)

1861732 METHYL

(METHYL OR ME)

678631 ESTER

501337 ESTERS

946527 ESTER

(ESTER OR ESTERS)

L4

26 9,11-OCTADECADIENOIC ACID METHYL ESTER

(9(W)11(W)OCTADECADIENOIC(W)ACID(W)METHYL(W)ESTER)

=&gt; d l4 1-2 ibib abs

L4 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:412570 CAPLUS

DOCUMENT NUMBER: 140:412330

TITLE: Conjugated fatty acid-based emulsion and methods for preparing and using same

INVENTOR(S): Changaris, David G.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040096468	A1	20040520	US 2002-298405	20021118
US 7074418	B2	20060711		
CA 2506298	A1	20040603	CA 2003-2506298	20031106
CA 2506298	C	20090331		
WO 2004045506	A2	20040603	WO 2003-US35597	20031106
WO 2004045506	A3	20040812		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003287584	A1	20040615	AU 2003-287584	20031106
US 20070212380	A1	20070913	US 2006-421866	20060602
US 7897160	B2	20110301		

PRIORITY APPLN. INFO.:

US 2002-298405 A 20021118

WO 2003-US35597 W 20031106

AB Stable emulsions comprising as a base one or more diene conjugated fatty acids (CFAs) are described. Amino acids and other macromols. can be used to stabilize the emulsion. The emulsion is also useful as a carrier and delivery vehicle of the macromols. to humans or animals in need of the



macromols. Plant oil exts., such as conjugated linoleic acid and its acylated derivs., are useful as the diene conjugated fatty acids that form the base of the stable emulsion. The emulsions formed are useful as nutritional or cosmetic adjuvant for oral based nutrition, skin diseases, cosmetic utility, enhancing oral nutrition, or pharmacol. benefit. Methods of producing and using the emulsions are also provided. For example, 50 mL of CFAs in the form of Tonalin (70% conjugated linoleic acid) were mech. mixed at room temperature with 5 g hydroxyproline to form a paste. Water (40 mL) was added to the paste and mech. mixed gently at room temperature to form a stable emulsion.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:253129 CAPLUS

DOCUMENT NUMBER: 140:272686

TITLE: Process for the preparation of conjugated linoleic acid from glyceridic oils

INVENTOR(S): Saebo, Asgeir; Saebo, Per Christian

PATENT ASSIGNEE(S): Natural Asa, Norway

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040058998	A1	20040325	US 2002-253216	20020924
US 6743931	B2	20040601		
CA 2499138	A1	20040408	CA 2003-2499138	20030924
CA 2499138	C	20100323		
WO 2004029186	A2	20040408	WO 2003-IB4897	20030924
WO 2004029186	A3	20040805		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003274548	A1	20040419	AU 2003-274548	20030924
AU 2003274548	B2	20070920		
EP 1546295	A2	20050629	EP 2003-758523	20030924
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006517237	T	20060720	JP 2004-539384	20030924
US 20040225142	A1	20041111	US 2004-858158	20040601
US 7115759	B2	20061003		
NO 2005001989	A	20050422	NO 2005-1989	20050422
PRIORITY APPLN. INFO.:				
			US 2002-253216	A 20020924
			WO 2003-IB4897	W 20030924

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to the manufacture of conjugated linoleic acid which utilize alcoholate catalysts and esters of sunflower oil, safflower oil, or corn oil as the source of linoleic acid. Furthermore, the esters can be converted into free fatty acids by saponification and acidification.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

=> s l4 and (pruify or purification)  
0 PRUIFY  
407487 PURIFICATION  
1352 PURIFICATIONS  
408433 PURIFICATION  
(PURIFICATION OR PURIFICATIONS)  
369573 PURIFN  
241 PURIFNS  
369677 PURIFN  
(PURIFN OR PURIFNS)  
595421 PURIFICATION  
(PURIFICATION OR PURIFN)

L5 1 L4 AND (PRUIFY OR PURIFICATION)

=> d l5 ibib abs

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1941:17078 CAPLUS  
DOCUMENT NUMBER: 35:17078  
ORIGINAL REFERENCE NO.: 35:2736a-d  
TITLE: Drying oils and resins. Purification of  
polymerized methyl linoleate by molecular distillation  
AUTHOR(S): Bradley, Theodore F.; Johnston, Wm. B.  
SOURCE: Journal of Industrial and Engineering Chemistry  
(Washington, D. C.) (1941), 33, 86-9  
CODEN: JIECAD; ISSN: 0095-9014  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB cf. C. A. 34, 6104.2. The mixture of methyl 9,12- and 9,11-octadecadienoates obtained by metholysis of dehydrated castor oil was heated 6 hrs. at 300° in CO<sub>2</sub> and then distilled at 1 mm. at this temperature; 54.6% of a viscous, pale yellow, polymeric residue was left. This gave, after 2 fractionations in a mol. still at 1 micron and 160-290°, a dimer (I), nD<sub>25</sub> 1.4768, d<sub>425</sub> 0.9346 and a trimer (II), nD<sub>25</sub> 1.4836, d<sub>425</sub> 0.9474. Saponification and I nos., mol. weight, mol. refraction, etc., of I indicate a dimethyl ester of 5,6-dihexyl-3-cyclohexene-1-(9-decenoic acid)-2-octanoic acid or 5-hexyl-6-(7-octenyl)-3-cyclohexene-1,2-dioctanoic acid, formed by the 1,2-1,4 addition of the conjugated double-bond systems of the octadecadienoic acid as in the formation of vinylcyclohexene from butadiene. It is suggested that II is a tricarboxylic octahydrobiphenyl derivative. There is no evidence of the formation for higher polymers. All data support the theory that the polymerization of drying oils depends upon the reaction of conjugated diene structures along the lines already established for butadiene.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

Serial No.: 10/581374\_E

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	52.88	73.71
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.48	-3.48

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 25, 2011 (20110225/UP).

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11,10,12-OCTADECADIENOIC ACID/CN  
E 9,11-OCTADECA-10,12-DIENOIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP  
L3 0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER  
L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L5 1 S L4 AND (PRUIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.96	74.67
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-3.48

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011  
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FILE COVERS 1907 - 3 Mar 2011 VOL 154 ISS 10  
FILE LAST UPDATED: 2 Mar 2011 (20110302/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 10,12-octadecadienoic acid methyl ester
    4689290 10
    1796599 12
        17656 OCTADECADIENOIC
    5241421 ACID
    1804215 ACIDS
    5799226 ACID
        (ACID OR ACIDS)
    1184072 METHYL
        791 METHYLS
    1184538 METHYL
        (METHYL OR METHYLS)
    1059680 ME
        12637 MES
    1067995 ME
        (ME OR MES)
    1861732 METHYL
        (METHYL OR ME)
    678631 ESTER
    501337 ESTERS
    946527 ESTER
        (ESTER OR ESTERS)
L6      16 10,12-OCTADECADIENOIC ACID METHYL ESTER
        (10 (W) 12 (W) OCTADECADIENOIC (W) ACID (W) METHYL (W) ESTER)

=> s 16 and (purify or purification)
    20910 PURIFY
    2325 PURIFIES
    23105 PURIFY
        (PURIFY OR PURIFIES)
    407487 PURIFICATION
    1352 PURIFICATIONS
    408433 PURIFICATION
        (PURIFICATION OR PURIFICATIONS)
    369573 PURIFN
```

241 PURIFNS  
 369677 PURIFN  
 (PURIFN OR PURIFNS)  
 595421 PURIFICATION  
 (PURIFICATION OR PURIFN)

L7 0 L6 AND (PURIFY OR PURIFICATION)

=> d 16 1-2 ibib abs

L6 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:412570 CAPLUS  
 DOCUMENT NUMBER: 140:412330  
 TITLE: Conjugated fatty acid-based emulsion and methods for  
 preparing and using same  
 INVENTOR(S): Changaris, David G.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 6 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040096468	A1	20040520	US 2002-298405	20021118
US 7074418	B2	20060711		
CA 2506298	A1	20040603	CA 2003-2506298	20031106
CA 2506298	C	20090331		
WO 2004045506	A2	20040603	WO 2003-US35597	20031106
WO 2004045506	A3	20040812		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003287584	A1	20040615	AU 2003-287584	20031106
US 20070212380	A1	20070913	US 2006-421866	20060602
US 7897160	B2	20110301		

PRIORITY APPLN. INFO.: US 2002-298405 A 20021118  
 WO 2003-US35597 W 20031106

AB Stable emulsions comprising as a base one or more diene conjugated fatty acids (CFAs) are described. Amino acids and other macromols. can be used to stabilize the emulsion. The emulsion is also useful as a carrier and delivery vehicle of the macromols. to humans or animals in need of the macromols. Plant oil exts., such as conjugated linoleic acid and its acylated derivs., are useful as the diene conjugated fatty acids that form the base of the stable emulsion. The emulsions formed are useful as nutritional or cosmetic adjuvant for oral based nutrition, skin diseases, cosmetic utility, enhancing oral nutrition, or pharmacol. benefit. Methods of producing and using the emulsions are also provided. For example, 50 mL of CFAs in the form of Tonalin (70% conjugated linoleic

acid) were mech. mixed at room temperature with 5 g hydroxyproline to form a paste. Water (40 mL) was added to the paste and mech. mixed gently at room temperature to form a stable emulsion.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2003:116137 CAPLUS

DOCUMENT NUMBER: 138:333409

TITLE: On the kinetics of the autoxidation of fats:  
Substrates with conjugated double bonds

AUTHOR(S): Brimberg, Ulla I.; Kamal-Eldin, Afaf

CORPORATE SOURCE: Jarfalla, Swed.

SOURCE: European Journal of Lipid Science and Technology  
(2003), 105(1), 17-22

CODEN: EJLTFM; ISSN: 1438-7697

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This paper provides a kinetic evaluation of rate data on the oxidation of conjugated linoleic acid Me esters published by Kern et al. almost 50 yr ago. The results of the kinetic anal. suggest that the oxidation of pure substrates with conjugated double bonds in bulk starts with carbon-oxygen crosslinking causing oligomerization (d.p.  $\approx 3$ ). The reaction then proceeds with simultaneous oligomerization and formation of monomeric cyclic peroxides. The oligomerization was described by the empirical equation used previously for oleate and linoleate, which was modified by adding a power term. In contrast to the case of linoleate, hydroperoxides are only minor products in the oxidation of methyl-conjugated linoleate suggesting that micelle formation does not play a significant role in this oxidation

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 9,11-OCTADECADIENOIC acid ethyl ester

2299179 9

1190715 11

17656 OCTADECADIENOIC

5241421 ACID

1804215 ACIDS

5799226 ACID

(ACID OR ACIDS)

568409 ETHYL

49 ETHYLS

568438 ETHYL

(ETHYL OR ETHYLS)

758959 ET

9895 ETS

767170 ET

(ET OR ETS)

1170055 ETHYL

(ETHYL OR ET)

678631 ESTER

501337 ESTERS

946527 ESTER  
    (ESTER OR ESTERS)  
L8           6 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
            (9(W)11(W)OCTADECADIENOIC(W)ACID(W)ETHYL(W)ESTER)  
  
=> s l8 and (purify or purification)  
    20910 PURIFY  
    2325 PURIFIES  
    23105 PURIFY  
        (PURIFY OR PURIFIES)  
    407487 PURIFICATION  
    1352 PURIFICATIONS  
    408433 PURIFICATION  
        (PURIFICATION OR PURIFICATIONS)  
    369573 PURIFN  
    241 PURIFNS  
    369677 PURIFN  
        (PURIFN OR PURIFNS)  
    595421 PURIFICATION  
        (PURIFICATION OR PURIFN)  
L9           0 L8 AND (PURIFY OR PURIFICATION)  
  
=> s 10,12-OCTADECADIENOIC acid ethyl ester  
    4689290 10  
    1796599 12  
        17656 OCTADECADIENOIC  
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    1804215 ACIDS  
    5799226 ACID  
        (ACID OR ACIDS)  
    568409 ETHYL  
        49 ETHYLS  
    568438 ETHYL  
        (ETHYL OR ETHYLS)  
    758959 ET  
        9895 ETS  
    767170 ET  
        (ET OR ETS)  
    1170055 ETHYL  
        (ETHYL OR ET)  
    678631 ESTER  
    501337 ESTERS  
    946527 ESTER  
        (ESTER OR ESTERS)  
L10          0 10,12-OCTADECADIENOIC ACID ETHYL ESTER  
            (10(W)12(W)OCTADECADIENOIC(W)ACID(W)ETHYL(W)ESTER)  
  
=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011  
    E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
    E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
    E 9,11,10,12-OCTADECADIENOIC ACID/CN  
    E 9,11-OCTADECA-10,12-DIENOIC ACID/CN  
    E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011  
L2 1 S L1/PREP  
L3 0 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L5 1 S L4 AND (PRIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011  
L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER  
L7 0 S L6 AND (PURIFY OR PURIFICATION)  
L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
L9 0 S L8 AND (PURIFY OR PURIFICATION)  
L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER

=> s ((thin (a) film) or (wiped (a) film)) (s) (rectification or fractionating)  
755520 THIN  
577 THINS  
755945 THIN  
(THIN OR THINS)  
1296983 FILM  
1057550 FILMS  
1667584 FILM  
(FILM OR FILMS)  
2911 WIPED  
1296983 FILM  
1057550 FILMS  
1667584 FILM  
(FILM OR FILMS)  
21297 RECTIFICATION  
125 RECTIFICATIONS  
21368 RECTIFICATION  
(RECTIFICATION OR RECTIFICATIONS)  
11955 FRACTIONATING  
L11 122 ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR FRACTIONATING)

=> d l11 1-2 ibib abs

L11 ANSWER 1 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN  
ACCESSION NUMBER: 2010:1429415 CAPLUS  
TITLE: Bipolar Conduction in SnO Thin Films  
AUTHOR(S): Hosono, Hideo; Ogo, Yoichi; Yanagi, Hiroshi; Kamiya, Toshio  
CORPORATE SOURCE: Frontier Research Center and Materials and Structures Laboratory, Tokyo Institute of Technology, Midori, Yokohama, 226-8503, Japan  
SOURCE: Electrochemical and Solid-State Letters (2010), Volume Date 2011, 14(1), H13-H16  
CODEN: ESLEF6; ISSN: 1099-0062  
PUBLISHER: Electrochemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English



AB Tin monoxide, SnO, is known as a p-type semiconductor. Comparison of the energy levels with the band alignment of oxide semiconductors implies that SnO is bipolar, and carrier polarity conversion to n-type was achieved by Sb doping. The electron mobility and the donor level are .apprx.2 cm<sup>2</sup> (V s)<sup>-1</sup> and .apprx.90 meV, which are similar to the hole mobility and the acceptor level in p-type SnO. n-Type conduction was further confirmed by the rectification characteristics of a homo p/n junction. A concept for realizing bipolar oxide semiconductors with high visible transparency is proposed.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1329799 CAPLUS

DOCUMENT NUMBER: 154:22807

TITLE: Effect of Li doping in NiO thin films on its transparent and conducting properties and its application in heteroepitaxial p-n junctions

AUTHOR(S): Dutta, Titas; Gupta, P.; Gupta, A.; Narayan, J.

CORPORATE SOURCE: Department of Materials Science and Engineering, North Carolina State University, Raleigh, NC, 27695-7907, USA

SOURCE: Journal of Applied Physics (2010), 108(8), 083715/1-083715/7

CODEN: JAPIAU; ISSN: 0021-8979

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Li-doped NiO (Li<sub>x</sub>Ni<sub>1-x</sub>O) thin films were epitaxially grown along 111 orientation on c-Al<sub>2</sub>O<sub>3</sub> by pulsed laser deposition. The structural, elec., and optical properties of the films were investigated using x-ray diffraction, four probe technique, and UV-visible spectra, resp. The epitaxial growth of 111 Li-doped NiO on 0001 sapphire was determined by high resolution x-ray  $\Phi$  scan. Effects of the deposition condition and Li doping concentration variations on the elec. and optical properties of Li doped NiO films were also investigated. The anal. of the resistivity data show that doped Li ions occupy the substitutional sites in the films, enhancing the p-type conductivity. The min. resistivity of 0.15  $\Omega$  cm was obtained for Li<sub>0.07</sub>Ni<sub>0.93</sub>O film. The activation energy of Li-doped NiO films were estimated to be in the range of 0.11-0.14 eV. Based upon these values, a possible elec. transport mechanism is discussed. A p-n heterojunction was also fabricated for the optimized p-Li doped NiO with n-ZnO. The insertion of i-MgZnO between the p and n layer led to improved current-voltage characteristics due to reduced leakage current. In the diode architecture, a heteroepitaxial relationship of [111]NiO.dblvert.[0001]MgZnO.dblvert.[0001]ZnO.dblvert.[0001]GZO.dblvert.[0001]Al<sub>2</sub>O<sub>3</sub> among the layers was obtained. The p-i-n heterojunction showed good rectification behavior with turn on voltage of 2.8 V and breakdown voltage of 8.0 V. (c) 2010 American Institute of Physics.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11,10,12-OCTADECADIENOIC ACID/CN  
E 9,11-OCTADECA-10,12-DIENOIC ACID/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP  
L3 0 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L5 1 S L4 AND (PRIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011

L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER  
L7 0 S L6 AND (PURIFY OR PURIFICATION)  
L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
L9 0 S L8 AND (PURIFY OR PURIFICATION)  
L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER  
L11 122 S ((THIN (A) FILM) OR (WIPE (A) FILM)) (S) (RECTIFICATION OR F

=> d l11 50-55 ibib abs

L11 ANSWER 50 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:618571 CAPLUS

DOCUMENT NUMBER: 145:222050

TITLE: Comparison of organic diode structures regarding  
high-frequency rectification behavior in  
radio-frequency identification tags

AUTHOR(S): Steudel, Soeren; De Vusser, Stijn; Myny, Kris; Lenes,  
Martijn; Genoe, Jan; Heremans, Paul

CORPORATE SOURCE: Polymer and Molecular Electronics, IMEC, Louvain,  
3001, Belg.

SOURCE: Journal of Applied Physics (2006), 99(11),  
114519/1-114519/7

CODEN: JAPIAU; ISSN: 0021-8979

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We compare the d.c. and high-frequency performance of 2 different organic diode structures, a vertical diode and an organic field effect transistor with shorted drain-gate contact, regarding their application in a rectifying circuit. We fabricated both diode structures using the organic semiconductor pentacene. D.c. measurements were performed showing a space-charge-limited current mobility of more than 0.1 cm<sup>2</sup>/V s for the vertical diode and a field effect mobility of 0.8 cm<sup>2</sup>/V s for the OTFT with shorted source-drain. High-frequency measurements of those diode structures in a rectifier configuration show that both types of diodes are able to follow the base-carrier frequency of 13.56 MHz which is essential for viable radio-frequency-identification (rf-ID) tags. Based on those results we evaluate the performance limits and advantages of each diode configuration regarding their application in an organic rf-ID tag.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 51 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN  
ACCESSION NUMBER: 2006:324689 CAPLUS  
DOCUMENT NUMBER: 145:303368  
TITLE: Electrical properties of nickel phthalocyanine thin films using gold and lead electrodes  
AUTHOR(S): Varghese, Abraham C.; Menon, C. S.  
CORPORATE SOURCE: Thin Film Lab, School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, 686 560, India  
SOURCE: Journal of Materials Science: Materials in Electronics (2006), 17(2), 149-153  
CODEN: JSMEEV; ISSN: 0957-4522  
PUBLISHER: Springer  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The elec. properties of Ni phthalocyanine (NiPc) thin film sandwich devices were investigated using Au and Pb electrode combinations. At low forward voltages with Au electrode as pos., the device showed rectification properties, while at higher forward voltages the conduction mechanisms were dominated by space charged limited conduction (SCLC) controlled by a single and an exponential trapping levels at two different ranges of applied voltages. Under the reverse bias a Schottky type of conduction process was identified. From our investigations we found that Au electrode acts as an ohmic contact and Pb electrodes as a blocking contact to NiPc layer with the existence of a barrier region at the lead electrode side of the NiPc layer. The effect of O doping on the elec. conductivity of these devices were also studied. After exposure to dry air for 30 days the device showed a higher order of current both in the forward and reverse bias. In the O-doped sample an increase in the rectification ratio and an enhanced value of trap concns. were observed

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 52 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN  
ACCESSION NUMBER: 2006:211382 CAPLUS  
DOCUMENT NUMBER: 145:134855  
TITLE: Growth of n-type ZnO thin films by using mixture gas of hydrogen and argon  
AUTHOR(S): Zhou, Xin; Wang, Shi-Qi; Lian, Gui-Jun; Xiong, Guang-Cheng  
CORPORATE SOURCE: Department of Physics, Peking University, Beijing, 100871, Peop. Rep. China  
SOURCE: Chinese Physics (Beijing, China) (2006), 15(1), 199-202  
CODEN: CHPHF4; ISSN: 1009-1963  
PUBLISHER: Chinese Physical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB High-quality oxide semiconductor ZnO thin films were prepared on single-crystal sapphire and LaAlO<sub>3</sub> substrates by pulsed laser deposition (PLD) in the mixture gas of H and Ar. Low resistivity n-type ZnO thin films with smoother surface were achieved by deposition at 600° in 1Pa of the mixture gas. Ferromagnetism was observed in Co-doped ZnO thin

films and rectification I - V curves were found in p-GaN/n-ZnO and p-CdTe/n-ZnO heterostructure junctions. Using mixture gas of H and Ar in PLD technique was a flexible method for depositing high-quality n-type oxide semiconductor films, especially for the multilayer thin film devices.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)  
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 53 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:172781 CAPLUS

DOCUMENT NUMBER: 144:379644

TITLE: Electrical conduction processes in as-deposited indium phthalocyanine chloride thin films using gold and aluminum electrode combination

AUTHOR(S): Samuel, Mammen; Menon, C. S.; Unnikrishnan, N. V.

CORPORATE SOURCE: School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, 686 560, India

SOURCE: Journal of Physics: Condensed Matter (2006), 18(1), 135-141

CODEN: JCOMEL; ISSN: 0953-8984

PUBLISHER: Institute of Physics Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sandwich structures (Au-InPcCl-Al) were fabricated by successive vacuum deposition of indium phthalocyanine chloride (InPcCl) thin films and aluminum (Al) fingers onto ohmic gold (Au) electrodes on glass substrates. Device characteristics of as-deposited Au/InPcCl/Al were obtained and found to show rectification properties. C.d.-voltage characteristics under forward bias (aluminum electrode neg.) are due to ohmic conduction at lower voltages. At higher voltages there is space charge limited conductivity

(SCLC) controlled by an exponential trapping distribution above the valence edge. Transport properties of the material at ambient temperature were obtained from the anal. of the samples in the ohmic and SCLC regions.

Under the reverse bias, Schottky emission is identified at lower voltages.

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 54 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:57855 CAPLUS

DOCUMENT NUMBER: 144:302737

TITLE: Synthesis of semiconducting thin films with nanometer-scale periodicity by solution-phase coassembly of zintl clusters with surfactants

AUTHOR(S): Riley, Andrew E.; Korlann, Scott D.; Richman, Erik K.; Tolbert, Sarah H.

CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of California, Los Angeles, Los Angeles, CA, 90095-1569, USA

SOURCE: Angewandte Chemie, International Edition (2006), 45(2), 235-241

CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Inorg. cluster anions (Zintl ions) were cross-linked by transition metals in the presence of alkyl ammonium surfactants and gold substrates to produce nanostructured thin films. These films display a variety of phases, including hexagonal, cubic, lamellar, and wormlike. Optical measurements show that the films are semiconductors, and I-V measurements indicate rectifying behavior.

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 55 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1273950 CAPLUS

DOCUMENT NUMBER: 144:498915

TITLE: Properties of ZnO thin films grown on Si substrates by MOCVD and ZnO/Si heterojunctions

AUTHOR(S): Zhang, Yuantao; Du, Guotong; Zhang, Baolin; Cui, Yongguo; Zhu, Huichao; Chang, Yuchun

CORPORATE SOURCE: College of Electronic Science and Engineering, State Key Laboratory on Integrated Optoelectronics, Jilin University, Changchun, 130012, Peop. Rep. China

SOURCE: Semiconductor Science and Technology (2005), 20(11), 1132-1135

CODEN: SSTEET; ISSN: 0268-1242

PUBLISHER: Institute of Physics Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Undoped n-ZnO thin films were successfully grown on p-Si (1 0 0) substrates by low-pressure metalorg. chemical vapor deposition (MOCVD). The c-axis oriented ZnO films were grown on Si at different temps. using diethyl-zinc (DEZn) and oxygen (O<sub>2</sub>). The structural and optical properties of ZnO films were investigated using x-ray diffraction and photoluminescence (PL) spectra, resp. The ZnO film grown at 610° shows the best crystallinity and optical quality. Current-voltage (I-V) characteristics of all n-ZnO/p-Si heterojunctions exhibit nonlinear and rectifying characteristics with a small current leakage in the reverse direction. Junction leakage of the heterojunction deposited at 620° is higher than those of the other heterojunctions.

OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s (14 or 16 or 18) (L) ((thin (a) film) or (wiped (a) film))

755520 THIN

577 THINS

755945 THIN

(THIN OR THINS)

1296983 FILM

1057550 FILMS

1667584 FILM

(FILM OR FILMS)

2911 WIPED

1296983 FILM

Serial No.: 10/581374\_E

1057550 FILMS

1667584 FILM

(FILM OR FILMS)

L12 0 (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPE (A) FILM))

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN

E 9,11,10,12-OCTADECADIENOIC ACID/CN

E 9,11-OCTADECADIENOIC ACID/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP

L3 0 S 9,11-OCTADECADIENOIC ACID METHYL ESTER

L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER

L5 1 S L4 AND (PURIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011

L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER

L7 0 S L6 AND (PURIFY OR PURIFICATION)

L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER

L9 0 S L8 AND (PURIFY OR PURIFICATION)

L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER

L11 122 S ((THIN (A) FILM) OR (WIPE (A) FILM)) (S) (RECTIFICATION OR F

L12 0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPE (A) FILM))

=> s molecular (a) distillation

1511188 MOLECULAR

122 MOLECULARS

1511282 MOLECULAR

(MOLECULAR OR MOLECULARS)

3069754 MOL

821261 MOLS

3513025 MOL

(MOL OR MOLS)

4123834 MOLECULAR

(MOLECULAR OR MOL)

75663 DISTILLATION

504 DISTILLATIONS

75849 DISTILLATION

(DISTILLATION OR DISTILLATIONS)

194110 DISTN

1896 DISTNS

194876 DISTN

(DISTN OR DISTNS)

221769 DISTILLATION

(DISTILLATION OR DISTN)

L13 2272 MOLECULAR (A) DISTILLATION

=> s (l4 or l6 or l8) (L) l13

L14 0 (L4 OR L6 OR L8) (L) L13

=> s l6 and l13

L15 0 L6 AND L13

=> s l6 and (molecular (a) distillation)

1511188 MOLECULAR

122 MOLECULARS

1511282 MOLECULAR

(MOLECULAR OR MOLECULARS)

3069754 MOL

821261 MOLS

3513025 MOL

(MOL OR MOLS)

4123834 MOLECULAR

(MOLECULAR OR MOL)

75663 DISTILLATION

504 DISTILLATIONS

75849 DISTILLATION

(DISTILLATION OR DISTILLATIONS)

194110 DISTN

1896 DISTNS

194876 DISTN

(DISTN OR DISTNS)

221769 DISTILLATION

(DISTILLATION OR DISTN)

2272 MOLECULAR (A) DISTILLATION

L16 0 L6 AND (MOLECULAR (A) DISTILLATION)

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN

E 9,11,10,12-OCTADECADIENOIC ACID/CN

E 9,11-OCTADECA-10,12-DIENOIC ACID/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN

E 9,11 (OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP

L3 0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER

L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER

L5 1 S L4 AND (PRUIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011

L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER

L7 0 S L6 AND (PURIFY OR PURIFICATION)

L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
 L9 0 S L8 AND (PURIFY OR PURIFICATION)  
 L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER  
 L11 122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F  
 L12 0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))  
 L13 2272 S MOLECULAR (A) DISTILLATION  
 L14 0 S (L4 OR L6 OR L8) (L) L13  
 L15 0 S L6 AND L13  
 L16 0 S L6 AND (MOLECULAR (A) DISTILLATION)

=> s 9,11-OCTADECADIENOIC acid alkyl ester

2299179 9  
 1190715 11  
 17656 OCTADECADIENOIC  
 5241421 ACID  
 1804215 ACIDS  
 5799226 ACID  
 (ACID OR ACIDS)  
 673607 ALKYL  
 7059 ALKYL  
 676832 ALKYL  
 (ALKYL OR ALKYL)  
 678631 ESTER  
 501337 ESTERS  
 946527 ESTER  
 (ESTER OR ESTERS)

L17 0 9,11-OCTADECADIENOIC ACID ALKYL ESTER  
 (9(W)11(W)OCTADECADIENOIC(W)ACID(W)ALKYL(W)ESTER)

=> s 10,12-OCTADECADIENOIC acid alkyl ester

4689290 10  
 1796599 12  
 17656 OCTADECADIENOIC  
 5241421 ACID  
 1804215 ACIDS  
 5799226 ACID  
 (ACID OR ACIDS)  
 673607 ALKYL  
 7059 ALKYL  
 676832 ALKYL  
 (ALKYL OR ALKYL)  
 678631 ESTER  
 501337 ESTERS  
 946527 ESTER  
 (ESTER OR ESTERS)

L18 0 10,12-OCTADECADIENOIC ACID ALKYL ESTER  
 (10(W)12(W)OCTADECADIENOIC(W)ACID(W)ALKYL(W)ESTER)

=> s 9,11-OCTADECADIENOIC acid butyl ester

2299179 9  
 1190715 11  
 17656 OCTADECADIENOIC  
 5241421 ACID  
 1804215 ACIDS  
 5799226 ACID  
 (ACID OR ACIDS)  
 338553 BUTYL



59 BUTYLS  
 338585 BUTYL  
     (BUTYL OR BUTYLS)  
 678631 ESTER  
 501337 ESTERS  
 946527 ESTER  
     (ESTER OR ESTERS)  
 L19           0 9,11-OCTADECADIENOIC ACID BUTYL ESTER  
               (9 (W) 11 (W) OCTADECADIENOIC (W) ACID (W) BUTYL (W) ESTER)

=> s 10,12-OCTADECADIENOIC acid  
 4689290 10  
 1796599 12  
     17656 OCTADECADIENOIC  
 5241421 ACID  
 1804215 ACIDS  
 5799226 ACID  
     (ACID OR ACIDS)  
 L20           473 10,12-OCTADECADIENOIC ACID  
               (10 (W) 12 (W) OCTADECADIENOIC (W) ACID)

=> s 9,11-OCTADECADIENOIC acid  
 2299179 9  
 1190715 11  
     17656 OCTADECADIENOIC  
 5241421 ACID  
 1804215 ACIDS  
 5799226 ACID  
     (ACID OR ACIDS)  
 L21           622 9,11-OCTADECADIENOIC ACID  
               (9 (W) 11 (W) OCTADECADIENOIC (W) ACID)

=> s 121 (s) (alkyl (4a) ester)  
 673607 ALKYL  
 7059 ALKYL  
 676832 ALKYL  
     (ALKYL OR ALKYL)  
 678631 ESTER  
 501337 ESTERS  
 946527 ESTER  
     (ESTER OR ESTERS)  
 L22           1 L21 (S) (ALKYL (4A) ESTER)

=> d 122 ibib abs

L22 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2011 ACS on STN  
 ACCESSION NUMBER: 2002:240994 CAPLUS  
 DOCUMENT NUMBER: 136:261913  
 TITLE: Method for producing glycerides of conjugated,  
           polyunsaturated fatty acids from their alkyl esters  
 INVENTOR(S): Baldenius, Kai-Uwe; Ptack, Arne  
 PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 26 pp.  
           CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024935	A1	20020328	WO 2001-EP10806	20010919
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002012256	A	20020402	AU 2002-12256	20010919
EP 1322776	A1	20030702	EP 2001-980406	20010919
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20030175914	A1	20030918	US 2003-380180	20030312
PRIORITY APPLN. INFO.:			DE 2000-10046879	A 20000920
			WO 2001-EP10806	W 20010919

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method is provided for producing glycerides that contain conjugated, polyunsatd. fatty acids by reacting the alkyl ester of the conjugated polyunsatd. fatty acids with glycerol or glycerides in the presence of a lipase. Thus, an conjugated linoleic acid preparation containing 36% 9Z,11E-octadecadienoic acid Et ester and 36% 10E,12Z-octadecadienoic acid Et ester and 3% other Et esters was reacted with glycerol and an immobilized lipase at 35 °C and 10 mbar pressure. A mixture of mono-, di-, and triglycerides was produced.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 120 (s) (alkyl (4a) ester)

673607 ALKYL

7059 ALKYLS

676832 ALKYL

(ALKYL OR ALKYLS)

678631 ESTER

501337 ESTERS

946527 ESTER

(ESTER OR ESTERS)

L23 1 L20 (S) (ALKYL (4A) ESTER)

=> d 123 ibib abs

L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2002:240994 CAPLUS

DOCUMENT NUMBER: 136:261913

TITLE: Method for producing glycerides of conjugated, polyunsaturated fatty acids from their alkyl esters

INVENTOR(S): Baldenius, Kai-Uwe; Ptock, Arne

PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 26 pp.

Serial No.: 10/581374\_E

CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024935	A1	20020328	WO 2001-EP10806	20010919
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002012256	A	20020402	AU 2002-12256	20010919
EP 1322776	A1	20030702	EP 2001-980406	20010919
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
US 20030175914	A1	20030918	US 2003-380180	20030312
PRIORITY APPLN. INFO.:			DE 2000-10046879	A 20000920
			WO 2001-EP10806	W 20010919

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method is provided for producing glycerides that contain conjugated, polyunsatd. fatty acids by reacting the alkyl ester of the conjugated polyunsatd. fatty acids with glycerol or glycerides in the presence of a lipase. Thus, an conjugated linoleic acid preparation containing 36% 9Z,11E-octadecadienoic acid Et ester and 36% 10E,12Z-octadecadienoic acid Et ester and 3% other Et esters was reacted with glycerol and an immobilized lipase at 35 °C and 10 mbar pressure. A mixture of mono-, di-, and triglycerides was produced.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11,10,12-OCTADECADIENOIC ACID/CN  
E 9,11-OCTADECA-10,12-DIENOIC ACID/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP

L3 0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER

L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L5 1 S L4 AND (PRIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011

L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER  
L7 0 S L6 AND (PURIFY OR PURIFICATION)  
L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
L9 0 S L8 AND (PURIFY OR PURIFICATION)  
L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER  
L11 122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F  
L12 0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))  
L13 2272 S MOLECULAR (A) DISTILLATION  
L14 0 S (L4 OR L6 OR L8) (L) L13  
L15 0 S L6 AND L13  
L16 0 S L6 AND (MOLECULAR (A) DISTILLATION)  
L17 0 S 9,11-OCTADECADIENOIC ACID ALKYL ESTER  
L18 0 S 10,12-OCTADECADIENOIC ACID ALKYL ESTER  
L19 0 S 9,11-OCTADECADIENOIC ACID BUTYL ESTER  
L20 473 S 10,12-OCTADECADIENOIC ACID  
L21 622 S 9,11-OCTADECADIENOIC ACID  
L22 1 S L21 (S) (ALKYL (4A) ESTER)  
L23 1 S L20 (S) (ALKYL (4A) ESTER)

=> s l20 (L) (alkyl (2a) ester#)  
673607 ALKYL  
7059 ALKYL  
676832 ALKYL  
(ALKYL OR ALKYL)  
946663 ESTER#  
L24 1 L20 (L) (ALKYL (2A) ESTER#)

=> s l24 not l23  
L25 0 L24 NOT L23

=> s l21 (L) (alkyl (2a) ester#)  
673607 ALKYL  
7059 ALKYL  
676832 ALKYL  
(ALKYL OR ALKYL)  
946663 ESTER#  
L26 1 L21 (L) (ALKYL (2A) ESTER#)

=> s l26 not l22  
L27 0 L26 NOT L22

=> s (l20 or l21) and (molecular (2a) distillation)  
1511188 MOLECULAR  
122 MOLECULARS  
1511282 MOLECULAR  
(MOLECULAR OR MOLECULARS)  
3069754 MOL  
821261 MOLS  
3513025 MOL  
(MOL OR MOLS)  
4123834 MOLECULAR

(MOLECULAR OR MOL)  
 75663 DISTILLATION  
 504 DISTILLATIONS  
 75849 DISTILLATION  
 (DISTILLATION OR DISTILLATIONS)  
 194110 DISTN  
 1896 DISTNS  
 194876 DISTN  
 (DISTN OR DISTNS)  
 221769 DISTILLATION  
 (DISTILLATION OR DISTN)  
 2778 MOLECULAR (2A) DISTILLATION  
 L28 4 (L20 OR L21) AND (MOLECULAR (2A) DISTILLATION)

=> d l28 1-4 ibib abs

L28 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN  
 ACCESSION NUMBER: 2008:784750 CAPLUS  
 DOCUMENT NUMBER: 151:268902  
 TITLE: Separation and purification of c9,t11-CLA isomer  
 AUTHOR(S): Yang, Lihua; Nagao, Toshihiro  
 CORPORATE SOURCE: College of Biotechnology, Inner Mongolia Agricultural  
 University, Hohhot, Inner Mongolia Province, 010018,  
 Peop. Rep. China  
 SOURCE: Hebei Nongye Daxue Xuebao (2007), 30(3), 101-104  
 CODEN: HNDBEM; ISSN: 1000-1573  
 PUBLISHER: Hebei Nongye Daxue Xuebao Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB For further studies on the physiol. and biochem. characteristic of  
 c9,t11-CLA (conjugated linoleic acid), high-purity c9,t11-CLA isomer must  
 be obtained. Candida rugosa lipase can be used to enrich the isomer of  
 c9,t11-CLA by a two-step selective esterification. For fractionation and  
 enrichment of it, mol. distillation was used, and the  
 c9,t11-CLA content in lauryl esters increased to 92.2 wt%.

L28 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN  
 ACCESSION NUMBER: 2004:1014245 CAPLUS  
 DOCUMENT NUMBER: 142:5567  
 TITLE: Conjugated fatty acid polyglycerin esters, their  
 manufacture with lipase, and their purification by  
 molecular distillation  
 INVENTOR(S): Yamauchi, Yoshie; Yamamoto, Takaya; Ogita, Kanefusa;  
 Shimada, Hiroshi; Nagao, Toshihiro; Watanabe, Yoshi  
 PATENT ASSIGNEE(S): Rinoru Oil Mills Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004331607	A	20041125	JP 2003-131893	20030509
PRIORITY APPLN. INFO.:			JP 2003-131893	20030509
OTHER SOURCE(S):		CASREACT 142:5567		

AB Title esters, useful as food emulsifiers, beverage additives, etc. (no data), are manufactured by esterification of conjugated fatty acids with polyglycerin with lipase as a catalyst. Thus, CLA 80 (conjugated linoleic acid) was esterified with diglycerin with Lipase G (Penicillium camembertii lipase) to manufacture esters with 70.2% esterification rate.

L28 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2003:494791 CAPLUS  
DOCUMENT NUMBER: 139:322593  
TITLE: Fractionation of conjugated linoleic acid isomers by selective hydrolysis with Candida rugosa lipase  
AUTHOR(S): Yamauchi-Sato, Yoshie; Nagao, Toshihiro; Yamamoto, Takaya; Terai, Tadamasu; Sugihara, Akio; Shimada, Yuji  
CORPORATE SOURCE: Rinoru Oil Mills Co. Ltd., Tokyo, 103-0027, Japan  
SOURCE: Journal of Oleo Science (2003), 52(7), 367-374  
CODEN: JOSOAP; ISSN: 1345-8957  
PUBLISHER: Japan Oil Chemists' Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB It was attempted to prepare cis-9, trans-11 conjugated linoleic acid (c9,t11-CLA) and t10,c12-CLA concs. that can be used as foods. A free fatty acid mixture (FFA-CLA) containing almost equal amts. of c9,t11- and t10,c12-CLAs was esterified with glycerol using immobilized Rhizomucor miehei lipase, and the resulting acylglycerols (Gly-CLA) were purified by mol. distillation. Contents of c9,t11- and t10,c12-CLAs in Gly-CLA were the same as those in FFA-CLA: c9,t11-CLA, 33.7%; t10,c12-CLA, 34.5%. Gly-CLA was first hydrolyzed with an equal weight of water and 1.0 U/g-mixture of Candida rugosa lipase, and c9,t11-CLA-rich FFAs were prepared by mol. distillation: purity of c9,t11-CLA based on the total content of c9,t11- and t10,c12-CLAs, 72.9%. Meanwhile, purity of t10,c12-CLA in acylglycerols was 65.0%. To further increase the purity, the acylglycerols were hydrolyzed again with 15 U/g-mixture of C. rugosa lipase, resulting in enrichment of t10,c12-CLA in acylglycerols (purity of t10,c12-CLA, 80.4%). Non-selective hydrolysis of t10,c12-CLA-rich acylglycerols with 200 U/g-mixture of C. rugosa lipase produced t10,c12-CLA-rich FFAs (purity of t10,c12-CLA, 81.5%). In addition, c9,t11-CLA-rich FFAs were successfully esterified with glycerol using immobilized R. miehei lipase, and c9,t11-CLA-rich acylglycerols can be synthesized (purity of c9,t11-CLA, 73.0%). The process was composed of reactions with C. rugosa and R. miehei lipases, which can be used for production of foods, and mol. distillation. Hence, the c9,t11- and t10,c12-CLA concs. can be used as foods.

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)  
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1941:17078 CAPLUS  
DOCUMENT NUMBER: 35:17078  
ORIGINAL REFERENCE NO.: 35:2736a-d  
TITLE: Drying oils and resins. Purification of polymerized methyl linoleate by molecular distillation  
AUTHOR(S): Bradley, Theodore F.; Johnston, Wm. B.  
SOURCE: Journal of Industrial and Engineering Chemistry (Washington, D. C.) (1941), 33, 86-9

CODEN: JIECAD; ISSN: 0095-9014  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB cf. C. A. 34, 6104.2. The mixture of methyl 9,12- and 9,11-octadecadienoates obtained by metholysis of dehydrated castor oil was heated 6 hrs. at 300° in CO<sub>2</sub> and then distilled at 1 mm. at this temperature; 54.6% of a viscous, pale yellow, polymeric residue was left. This gave, after 2 fractionations in a mol. still at 1 micron and 160-290°, a dimer (I), nD<sub>25</sub> 1.4768, d<sub>425</sub> 0.9346 and a trimer (II), nD<sub>25</sub> 1.4836, d<sub>425</sub> 0.9474. Saponification and I nos., mol. weight, mol. refraction, etc., of I indicate a dimethyl ester of 5,6-dihexyl-3-cyclohexene-1-(9-decenoic acid)-2-octanoic acid or 5-hexyl-6-(7-octenyl)-3-cyclohexene-1,2-dioctanoic acid, formed by the 1,2-1,4 addition of the conjugated double-bond systems of the octadecadienoic acid as in the formation of vinylcyclohexene from butadiene. It is suggested that II is a tricarboxylic octahydrobiphenyl derivative. There is no evidence of the formation for higher polymers. All data support the theory that the polymerization of drying oils depends upon the reaction of conjugated diene structures along the lines already established for butadiene.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11,10,12-OCTADECADIENOIC ACID/CN  
E 9,11-OCTADECADIENOIC ACID/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP  
L3 0 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L5 1 S L4 AND (PURIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011

L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER  
L7 0 S L6 AND (PURIFY OR PURIFICATION)  
L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
L9 0 S L8 AND (PURIFY OR PURIFICATION)  
L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER  
L11 122 S ((THIN (A) FILM) OR (WIPE (A) FILM)) (S) (RECTIFICATION OR F  
L12 0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPE (A) FILM))  
L13 2272 S MOLECULAR (A) DISTILLATION  
L14 0 S (L4 OR L6 OR L8) (L) L13

L15 0 S L6 AND L13  
 L16 0 S L6 AND (MOLECULAR (A) DISTILLATION)  
 L17 0 S 9,11-OCTADECADIENOIC ACID ALKYL ESTER  
 L18 0 S 10,12-OCTADECADIENOIC ACID ALKYL ESTER  
 L19 0 S 9,11-OCTADECADIENOIC ACID BUTYL ESTER  
 L20 473 S 10,12-OCTADECADIENOIC ACID  
 L21 622 S 9,11-OCTADECADIENOIC ACID  
 L22 1 S L21 (S) (ALKYL (4A) ESTER)  
 L23 1 S L20 (S) (ALKYL (4A) ESTER)  
 L24 1 S L20 (L) (ALKYL (2A) ESTER#)  
 L25 0 S L24 NOT L23  
 L26 1 S L21 (L) (ALKYL (2A) ESTER#)  
 L27 0 S L26 NOT L22  
 L28 4 S (L20 OR L21) AND (MOLECULAR (2A) DISTILLATION)

=> s (l20 or l21) and (fractionating or recitification)

11955 FRACTIONATING  
 7 RECITIFICATION

L29 0 (L20 OR L21) AND (FRACTIONATING OR RECITIFICATION)

=> s (l20 or l21) and distillation

75663 DISTILLATION  
 504 DISTILLATIONS  
 75849 DISTILLATION  
 (DISTILLATION OR DISTILLATIONS)  
 194110 DISTN  
 1896 DISTNS  
 194876 DISTN  
 (DISTN OR DISTNS)  
 221769 DISTILLATION  
 (DISTILLATION OR DISTN)

L30 27 (L20 OR L21) AND DISTILLATION

=> s l30 and (fractionation or fractionating)

116596 FRACTIONATION  
 3288 FRACTIONATIONS  
 118408 FRACTIONATION  
 (FRACTIONATION OR FRACTIONATIONS)  
 11955 FRACTIONATING

L31 6 L30 AND (FRACTIONATION OR FRACTIONATING)

=> d l31 1-6 ibib abs

L31 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:784750 CAPLUS

DOCUMENT NUMBER: 151:268902

TITLE: Separation and purification of c9,t11-CLA isomer

AUTHOR(S): Yang, Lihua; Nagao, Toshihiro

CORPORATE SOURCE: College of Biotechnology, Inner Mongolia Agricultural University, Hohhot, Inner Mongolia Province, 010018, Peop. Rep. China

SOURCE: Hebei Nongye Daxue Xuebao (2007), 30(3), 101-104

CODEN: HNDBEM; ISSN: 1000-1573

PUBLISHER: Hebei Nongye Daxue Xuebao Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB For further studies on the physiol. and biochem. characteristic of



c9,t11-CLA (conjugated linoleic acid), high-purity c9,t11-CLA isomer must be obtained. *Candida rugosa* lipase can be used to enrich the isomer of c9,t11-CLA by a two-step selective esterification. For fractionation and enrichment of it, mol. distillation was used, and the c9,t11-CLA content in lauryl esters increased to 92.2 wt%.

L31 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2003:494791 CAPLUS  
DOCUMENT NUMBER: 139:322593  
TITLE: Fractionation of conjugated linoleic acid isomers by selective hydrolysis with *Candida rugosa* lipase  
AUTHOR(S): Yamauchi-Sato, Yoshie; Nagao, Toshihiro; Yamamoto, Takaya; Terai, Tadamasu; Sugihara, Akio; Shimada, Yuji  
CORPORATE SOURCE: Rinoru Oil Mills Co. Ltd., Tokyo, 103-0027, Japan  
SOURCE: Journal of Oleo Science (2003), 52(7), 367-374  
CODEN: JOSOAP; ISSN: 1345-8957  
PUBLISHER: Japan Oil Chemists' Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB It was attempted to prepare cis-9, trans-11 conjugated linoleic acid (c9,t11-CLA) and t10,c12-CLA concs. that can be used as foods. A free fatty acid mixture (FFA-CLA) containing almost equal amts. of c9,t11- and t10,c12-CLAs was esterified with glycerol using immobilized *Rhizomucor miehei* lipase, and the resulting acylglycerols (Gly-CLA) were purified by mol. distillation. Contents of c9,t11- and t10,c12-CLAs in Gly-CLA were the same as those in FFA-CLA: c9,t11-CLA, 33.7%; t10,c12-CLA, 34.5%. Gly-CLA was first hydrolyzed with an equal weight of water and 1.0 U/g-mixture of *Candida rugosa* lipase, and c9,t11-CLA-rich FFAs were prepared by mol. distillation: purity of c9,t11-CLA based on the total content of c9,t11- and t10,c12-CLAs, 72.9%. Meanwhile, purity of t10,c12-CLA in acylglycerols was 65.0%. To further increase the purity, the acylglycerols were hydrolyzed again with 15 U/g-mixture of *C. rugosa* lipase, resulting in enrichment of t10,c12-CLA in acylglycerols (purity of t10,c12-CLA, 80.4%). Non-selective hydrolysis of t10,c12-CLA-rich acylglycerols with 200 U/g-mixture of *C. rugosa* lipase produced t10,c12-CLA-rich FFAs (purity of t10,c12-CLA, 81.5%). In addition, c9,t11-CLA-rich FFAs were successfully esterified with glycerol using immobilized *R. miehei* lipase, and c9,t11-CLA-rich acylglycerols can be synthesized (purity of c9,t11-CLA, 73.0%). The process was composed of reactions with *C. rugosa* and *R. miehei* lipases, which can be used for production of foods, and mol. distillation. Hence, the c9,t11- and t10,c12-CLA concs. can be used as foods.

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)  
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1965:51067 CAPLUS  
DOCUMENT NUMBER: 62:51067  
ORIGINAL REFERENCE NO.: 62:9000b-c  
TITLE: The geometric isomers of conjugated octadecadienoates from dehydrated methyl ricinoleate  
AUTHOR(S): Body, D. R.; Shorland, F. B.  
CORPORATE SOURCE: Dept. Sci. Ind. Res., Wellington, N. Z.  
SOURCE: Journal of the American Oil Chemists' Society (1965),

42(1), 5-8  
CODEN: JAOCA7; ISSN: 0003-021X

DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB The dehydration of Me ricinoleate by heating in vacuo in the presence of KHSO<sub>4</sub> resulted in the formation of the following conjugated octadecadienoates expressed as a % of the final product: cis,trans (trans,cis), 14.3; cis,cis, 11.2; trans,trans, 7.3. The isomers contained the double bonds predominantly in the 9,11 position but the possible presence of traces of 8,10 and other conjugated isomers is not excluded. Using urea "inclusion" fractionation and low temperature crystallization from Me<sub>2</sub>CO, Me cis-9,cis-11-octadecadienoate was isolated. The Me esters of com. dehydrated castor oil fatty acids contained the following % of conjugated octadecadienoate isomers: cis,trans (trans,cis), 20.3; cis,cis, 8.0; trans,trans, 5.4. From these mixts. concentration of cis,trans (trans,cis)- and trans,trans-octade-cadienoates were prepared by fractional distn . and low temperature crystallization The conjugated octadecadienoates consisted of mixts. of positional isomers with double bonds mainly in the 8,10 and 9,11 positions with lesser amts. in the 7,9 and 10,12 positions. 27 references.

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L31 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1956:89294 CAPLUS  
DOCUMENT NUMBER: 50:89294  
ORIGINAL REFERENCE NO.: 50:16821g-i,16822a-e  
TITLE: The hydrogenation of conjugated systems particularly of chinese wood oil  
AUTHOR(S): Van Loon, J.; Kooij, L. W.; Vermunt, G.  
SOURCE: Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1950), 69, 1567-75  
CODEN: RTCPB4; ISSN: 0370-7539  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The hydrogenation of Chinese wood oil (I) at low pressure demonstrated a more complicated reaction than previously postulated by Boeseken, et al. (C.A. 24, 2985), since shifting of the double bonds takes place besides the addition of H. I was hydrogenated at 180° and atmospheric pressure in the presence of 3% diatomaceous earth containing 20% Ni while being stirred at 1500 r.p.m. The nD<sub>70</sub> value and the diene value (determined with maleic anhydride) dropped successively from 1.5018 and 70 to: 1.4972, 61; 1.4904, 51; 1.4824, 42; 1.4764, 32; 1.4725, 27. The % saturation of the I and final hydrogenation product were 4.15 and 4.6, resp. A similar decrease of the nD<sub>70</sub> and diene values was observed in a run carried out with stirring at 8000 r.p.m, under otherwise identical conditions. The initial values 1.5018, 70, changed successively to: 1.4821, 43; 1.4789, 38; 1.4770, 34; 1.4668, 20. The same values of Et esters of wood oil fatty acids, 1.4759, 62. dropped during hydrogenation at 8000 r.p.m, successively to: 1.4620, 62; 1.4451, 22; 1.4342, 2; 1.4338, 0. I, nD<sub>70</sub> 1.5018, diene value 70, was hydrogenated at 145° and 1 r.p.m, under various initial pressures (initial pressure in atmospheric, nD<sub>70</sub>, and diene value given) 4.5, 1.4868, 53; 3.3, 1.4759, 36; 6.1, 1.4570, 7.5; 4.3, 1.4527, 5.4. I was hydrogenated at 1 atmospheric and 180° in the usual manner until 2 molar equivs. H had been absorbed; the resulting octadecenoic acids (II) were oxidized with

KMnO<sub>4</sub> and the dibasic acids separated from the fission products and recrystd. from CHCl<sub>3</sub> and H<sub>2</sub>O. The dicarboxylic acids found were C<sub>13</sub> in a small amount, C<sub>12</sub> as main fraction, and C<sub>11</sub>, C<sub>10</sub>, and C<sub>9</sub> in smaller amts. than C<sub>12</sub>; the hydrogenated material contains thus the following II (position of double bond given): 13-14 (minor amount); 12-13 (main component); 11-12 (2nd main component); 10-11 (minor amount); 9-10 (minor amount). A similar run was carried out at 1 atmospheric and 180° until 1 molar equivalent H had been absorbed; oxidative fission of the hydrogenation product and steam distillation of the mixture followed by fractionation gave AmCO<sub>2</sub>H and PrCO<sub>2</sub>H (but no BuCO<sub>2</sub>H); the following dicarboxylic acids were isolated from the residue and recrystd. from CHCl<sub>3</sub>: C<sub>12</sub> and C<sub>11</sub> (main components); C<sub>10</sub> and C<sub>9</sub> (minor components). These fission products indicate the presence of the following linoleic acids (position of double bonds given): 9,12 and (or) 9,14; 10,12; 11,14; 12,14. I hydrogenated at 5-1 atmospheric and 145° until 2 molar equivs. H was absorbed gave a product which still contained eleostearic acid (IV) with a considerably increased percentage of C<sub>17</sub>H<sub>35</sub>CO<sub>2</sub>H (V); ozonization as well as KMnO<sub>4</sub> oxidation of the hydrogenation product gave as main fission products the C<sub>9</sub>, C<sub>12</sub>, and C<sub>13</sub> dicarboxylic acids; the hydrogenation under these conditions is not selective and a very complicated mixture of fatty acids is formed. Addition of 1 molar equivalent H at 5-1 atmospheric and 145° to I gave a product which still contained a large amount of IV together with an increased quantity of V and di- and monounsaturated acids; the hydrogenation product oxidized with ozone or KMnO<sub>4</sub> gave as main products C<sub>9</sub>, C<sub>10</sub>, and C<sub>12</sub> dicarboxylic acids and C<sub>5</sub> and C<sub>6</sub> monocarboxylic acids. These results demonstrate that a very complicated mixture of component acids is already formed during the 1st stage of the hydrogenation at 5 atmospheric pressure and 145°.

L31 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1941:54042 CAPLUS

DOCUMENT NUMBER: 35:54042

ORIGINAL REFERENCE NO.: 35:8330e-i

TITLE: The component acids of *Sterculia foetida* seed fat (sterculia oil): a correction of work previously reported

AUTHOR(S): Hilditch, T. P.; Meara, M. L.; Zaky, Y. A. H.

SOURCE: Journal of the Society of Chemical Industry, London (1941), 60, 198-203

CODEN: JSCIAN; ISSN: 0368-4075

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C. A. 28, 5265.4. A reinvestigation of the seed and fruit-coat fats previously reported as those of *Sterculia foetida* but actually obtained from *Dacryodes rostrata*, var. *pubescens* (Bl.) H. J. Lam, gave the following values (% by weight) for the component acids in the pale-green solid fat m. 32-34°, I2 number (Wijs) 53.3, saponification number 302.9, free acidity (as oleic acid) 1.9%: myristic 1.0, palmitic 12.7, stearic 30.9, arachidic 3.1, oleic 49.5, linoleic 2.8. These figures are in agreement with the previous investigation but show a significant deviation from those of Steger and van Loon (C. A. 34, 3937.9), and it is concluded that earlier workers investigated material from *Dacryodes* and not from *Canarium* species. Extraction of seeds of *Sterculia foetida* with light petroleum (b. 40-60°) yielded a yellow oil, liquid at room temperature, saponification number 300,

I2 number (Wijs 1/2 hr.) 70.0, free acidity (as oleic acid) 2.5%, unsaponified matter less than 1%, n<sub>D</sub>20 1.476. The oil polymerizes suddenly on heating

to 250°. The following percentages (by weight) of fat acids were estimated from the results of (1) distillation of the mixed Me esters, (2) Pb salt separation of the mixed fat acids and ester fractionation of the hydrogenated acids (Ni/kieselguhr at 180°), (3) crystallization of the hydrogenated original oil from acetone: myristic 5.6, palmitic 8.8, oleic and linoleic 13.2, C19H34O2 72.4. From the products of oxidation with KMnO4 of the mixed fat acid (Me hexyl ketone, azelaic acid, heptoic acid, an unidentified water-soluble dibasic acid) it is concluded that C19H34O2 is 12-methyl-9,11-octadecadienoic acid  
. The position of the 9-bond is not quite certain.

L31 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1941:17078 CAPLUS

DOCUMENT NUMBER: 35:17078

ORIGINAL REFERENCE NO.: 35:2736a-d

TITLE: Drying oils and resins. Purification of polymerized methyl linoleate by molecular distillation

AUTHOR(S): Bradley, Theodore F.; Johnston, Wm. B.

SOURCE: Journal of Industrial and Engineering Chemistry  
(Washington, D. C.) (1941), 33, 86-9  
CODEN: JIECAD; ISSN: 0095-9014

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C. A. 34, 6104.2. The mixture of methyl 9,12- and 9,11-octadecadienoates obtained by metholysis of dehydrated castor oil was heated 6 hrs. at 300° in CO2 and then distilled at 1 mm. at this temperature; 54.6% of a viscous, pale yellow, polymeric residue was left. This gave, after 2 fractionations in a mol. still at 1 micron and 160-290°, a dimer (I), nD25 1.4768, d425 0.9346 and a trimer (II), nD25 1.4836, d425 0.9474. Saponification and I nos., mol. weight, mol. refraction, etc., of I indicate a dimethyl ester of 5,6-dihexyl-3-cyclohexene-1-(9-decenoic acid)-2-octanoic acid or 5-hexyl-6-(7-octenyl)-3-cyclohexene-1,2-dioctanoic acid, formed by the 1,2-1,4 addition of the conjugated double-bond systems of the octadecadienoic acid as in the formation of vinylcyclohexene from butadiene. It is suggested that II is a tricarboxylic octahydrobiphenyl derivative. There is no evidence of the formation for higher polymers. All data support the theory that the polymerization of drying oils depends upon the reaction of conjugated diene structures along the lines already established for butadiene.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

=&gt; FIL STNGUIDE

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FULL ESTIMATED COST	273.96	348.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-19.14	-22.62

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(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011

E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN  
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11,10,12-OCTADECADIENOIC ACID/CN  
E 9,11-OCTADECA-10,12-DIENOIC ACID/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN  
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011

L2 1 S L1/PREP  
L3 0 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER  
L5 1 S L4 AND (PURIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011

L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER  
L7 0 S L6 AND (PURIFY OR PURIFICATION)  
L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER  
L9 0 S L8 AND (PURIFY OR PURIFICATION)  
L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER  
L11 122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F  
L12 0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))  
L13 2272 S MOLECULAR (A) DISTILLATION  
L14 0 S (L4 OR L6 OR L8) (L) L13  
L15 0 S L6 AND L13  
L16 0 S L6 AND (MOLECULAR (A) DISTILLATION)  
L17 0 S 9,11-OCTADECADIENOIC ACID ALKYL ESTER  
L18 0 S 10,12-OCTADECADIENOIC ACID ALKYL ESTER  
L19 0 S 9,11-OCTADECADIENOIC ACID BUTYL ESTER  
L20 473 S 10,12-OCTADECADIENOIC ACID  
L21 622 S 9,11-OCTADECADIENOIC ACID  
L22 1 S L21 (S) (ALKYL (4A) ESTER)  
L23 1 S L20 (S) (ALKYL (4A) ESTER)  
L24 1 S L20 (L) (ALKYL (2A) ESTER#)  
L25 0 S L24 NOT L23  
L26 1 S L21 (L) (ALKYL (2A) ESTER#)  
L27 0 S L26 NOT L22  
L28 4 S (L20 OR L21) AND (MOLECULAR (2A) DISTILLATION)  
L29 0 S (L20 OR L21) AND (FRACTIONATING OR RECTIFICATION)  
L30 27 S (L20 OR L21) AND DISTILLATION  
L31 6 S L30 AND (FRACTIONATION OR FRACTIONATING)

FILE 'STNGUIDE' ENTERED AT 09:12:38 ON 03 MAR 2011

=> log off

Serial No.: 10/581374\_E

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF  
LOGOFF? (Y)/N/HOLD:y  
STN INTERNATIONAL LOGOFF AT 09:16:01 ON 03 MAR 2011